Contents of Aquaculture, Volume 114

OL. 114 NOS. 1/2	
Diseases, Parasites and Predators	
The effect of stress on the immune response of Atlantic salmon (Salmo diets containing different amounts of vitamin C	salar L.) fed
I. Thompson, A. White, T.C. Fletcher, D.F. Houlihan and C.J. Secoulk)	
Genetics and Breeding	
Genetic variation in lysozyme activity and spontaneous haemolytic ac salmon (Salmo salar)	*
K.H. Røed (Oslo, Norway), K.T. Fjalestad (Ås-NLH, Norway) an (Oslo, Norway)	
Physiological factors affecting triploid production in rainbow trout, On mykiss	ncorhynchus
N.F. Diaz, P. Iturra, A. Veloso, F. Estay and N. Colihueque (Santia	ago, Chile) 33
Husbandry and Management	
Comparison of two techniques for determining community respiration ponds	
D. Teichert-Coddington and B. Green (Auburn, AL, USA)	
M.C. Geddes and M. Smallridge (Adelaide, S.A., Australia) Ovarian development in relation to changes in the external genitalia in monodon	
E.T. Quinitio, R.M. Caballero and L. Gustilo (Iloilo, Philippines)	71
Nutrition	
Critical operations on the manufacture of pelleted feeds for crustacear S. Estrada Flores and S.E. Valdes Martinez (Edo. de Mexico, Mexi	co) 83
The effect of water temperature and feeding rate on the growth rate of mesopotamicus) raised in cages	
J.R. Borghetti and C. Canzi (Foz do Iguaçu, Paraná, Brazil) Growth of juvenile common wolffish (Anarhichas lupus) fed practical	fish feeds
D. Stefanussen (Oslo, Norway), Ø. Lie (Bergen, Norway), E. Mol Norway) and K.I. Ugland (Oslo, Norway)	
Evaluation of different types and levels of triglycerides, singly and in a different levels of n-3 highly unsaturated fatty acid ethyl esters in d drum, Sciaenops ocellatus	combination with
R.T. Lochmann and D.M. Gatlin III (College Station, TX, USA).	113

Effect of spawning fast on lipid and fatty acid composition of eggs of captive turbot (Scophthalmus maximus L.)	
L. McEvoy (Port Erin, Isle of Man, UK), D. Holland (Menai Bridge, Anglesey,	
UK) and J. McEvoy (Swansea, UK) Effects of different kinds of dietary lipid on growth and fatty acid composition of juvenile sunshine bass, Morone chrysops ♀ × M. saxatilis♂	
G.R. Nematipour and D.M. Gatlin III (College Station, TX, USA)	141
Physiology and Endocrinology Overripening of ovulated eggs in goldfish I. Morphological changes	
M.J. Formacion, R. Hori and T.J. Lam (Singapore) Responses of a non-migratory stock of brown trout, Salmo trutta, to ovine growth hormone treatment and seawater exposure	133
J.M.E. Almendras, P. Prunet (Rennes, France) and G. Boeuf (Plouzané, France) The effect of different sex groups on growth rate and mortality of young Nile crocod	
(Crocodilus niloticus) A. Zilber, Y. Regev (Mombassa, Kenya) and Y. Yom-Tov (Ramat Aviv, Israel)	191
A. Zhoer, 1. Regev (Mombassa, Kenya) and 1. 10m-10v (Ramat Aviv, Israel)	101
Book Review	
Abalone farming	185
Books Received	186
Announcements	187
VOL. 114 NOS. 3/4	UST 1993
VOL. 114 NOS. 3/4 1 AUGU	UST 1993
VOL. 114 NOS. 3/4 Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fithree farms in northwest Spain	
Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fi three farms in northwest Spain A.E. Toranzo (Santiago de Compostela, Spain), B. Novoa (Vigo, Spain), J.L. Romalde, S. Núñez (Santiago de Compostela, Spain), S. Devesa, E. Mariño	rom
Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fi three farms in northwest Spain A.E. Toranzo (Santiago de Compostela, Spain), B. Novoa (Vigo, Spain), J.L. Romalde, S. Núñez (Santiago de Compostela, Spain), S. Devesa, E. Mariño R. Silva (La Coruña, Spain), E. Martínez (Pontevedra, Spain), A. Figueras (Vigo, Spain), B. Martínez (Pontevedra, Spain), A. Figueras (Vigo, Spain), B. Martínez (Pontevedra, Spain), A. Figueras (Vigo, Spain), B. Martínez (Pontevedra, Spain), B. Ma	rom
Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fi three farms in northwest Spain A.E. Toranzo (Santiago de Compostela, Spain), B. Novoa (Vigo, Spain), J.L. Romalde, S. Núñez (Santiago de Compostela, Spain), S. Devesa, E. Mariño	rom
Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fi three farms in northwest Spain A.E. Toranzo (Santiago de Compostela, Spain), B. Novoa (Vigo, Spain), J.L. Romalde, S. Núñez (Santiago de Compostela, Spain), S. Devesa, E. Mariño R. Silva (La Coruña, Spain), E. Martínez (Pontevedra, Spain), A. Figueras (Vi Spain) and J.L. Barja (Santiago de Compostela, Spain)	rom
Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fi three farms in northwest Spain A.E. Toranzo (Santiago de Compostela, Spain), B. Novoa (Vigo, Spain), J.L. Romalde, S. Núñez (Santiago de Compostela, Spain), S. Devesa, E. Mariño R. Silva (La Coruña, Spain), E. Martínez (Pontevedra, Spain), A. Figueras (Vi Spain) and J.L. Barja (Santiago de Compostela, Spain) Genetics and Breeding Differential stocking incidence in brown trout (Salmo trutta) populations from Northwestern Spain	rom 2, igo, 189
Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fi three farms in northwest Spain A.E. Toranzo (Santiago de Compostela, Spain), B. Novoa (Vigo, Spain), J.L. Romalde, S. Núñez (Santiago de Compostela, Spain), S. Devesa, E. Mariño, R. Silva (La Coruña, Spain), E. Martínez (Pontevedra, Spain), A. Figueras (Vi Spain) and J.L. Barja (Santiago de Compostela, Spain)	irom 5, 180, 189
Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fi three farms in northwest Spain A.E. Toranzo (Santiago de Compostela, Spain), B. Novoa (Vigo, Spain), J.L. Romalde, S. Núñez (Santiago de Compostela, Spain), S. Devesa, E. Mariño R. Silva (La Coruña, Spain), E. Martínez (Pontevedra, Spain), A. Figueras (Vi Spain) and J.L. Barja (Santiago de Compostela, Spain) Genetics and Breeding Differential stocking incidence in brown trout (Salmo trutta) populations from Northwestern Spain	irom 5, 180, 189
Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fi three farms in northwest Spain A.E. Toranzo (Santiago de Compostela, Spain), B. Novoa (Vigo, Spain), J.L. Romalde, S. Núñez (Santiago de Compostela, Spain), S. Devesa, E. Mariñor R. Silva (La Coruña, Spain), E. Martínez (Pontevedra, Spain), A. Figueras (Vi Spain) and J.L. Barja (Santiago de Compostela, Spain) Genetics and Breeding Differential stocking incidence in brown trout (Salmo trutta) populations from Northwestern Spain P. Martinez, J. Arias, J. Castro and L. Sanchez (Lugo, Spain) Mitochondrial DNA nucleotide sequence variation in Atlantic salmon (Salmo salabrown trout (S. trutta), rainbow trout (Oncorhynchus mykiss) and brook trout	igo,
Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fi three farms in northwest Spain A.E. Toranzo (Santiago de Compostela, Spain), B. Novoa (Vigo, Spain), J.L. Romalde, S. Núñez (Santiago de Compostela, Spain), S. Devesa, E. Mariño R. Silva (La Coruña, Spain), E. Martínez (Pontevedra, Spain), A. Figueras (Vi Spain) and J.L. Barja (Santiago de Compostela, Spain). Genetics and Breeding Differential stocking incidence in brown trout (Salmo trutta) populations from Northwestern Spain P. Martinez, J. Arias, J. Castro and L. Sanchez (Lugo, Spain). Mitochondrial DNA nucleotide sequence variation in Atlantic salmon (Salmo salai brown trout (S. trutta), rainbow trout (Oncorhynchus mykiss) and brook trout (Salvelinus fontinalis) from Tasmania, Australia J.R. Ovenden, R. Bywater and R.W.G. White (Hobart, Tasmania, Australia)	igo,
Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fi three farms in northwest Spain A.E. Toranzo (Santiago de Compostela, Spain), B. Novoa (Vigo, Spain), J.L. Romalde, S. Núñez (Santiago de Compostela, Spain), S. Devesa, E. Mariño R. Silva (La Coruña, Spain), E. Martínez (Pontevedra, Spain), A. Figueras (Vi Spain) and J.L. Barja (Santiago de Compostela, Spain). Genetics and Breeding Differential stocking incidence in brown trout (Salmo trutta) populations from Northwestern Spain P. Martinez, J. Arias, J. Castro and L. Sanchez (Lugo, Spain). Mitochondrial DNA nucleotide sequence variation in Atlantic salmon (Salmo salar brown trout (S. trutta), rainbow trout (Oncorhynchus mykiss) and brook trout (Salvelinus fontinalis) from Tasmania, Australia J.R. Ovenden, R. Bywater and R.W.G. White (Hobart, Tasmania, Australia) Husbandry and Management Respiration rate of the kuruma prawn, Penaeus japonicus Bate, is not increased by	igo,
Diseases, Parasites and Predators Microflora associated with healthy and diseased turbot (Scophthalmus maximus) fi three farms in northwest Spain A.E. Toranzo (Santiago de Compostela, Spain), B. Novoa (Vigo, Spain), J.L. Romalde, S. Núñez (Santiago de Compostela, Spain), S. Devesa, E. Mariño R. Silva (La Coruña, Spain), E. Martínez (Pontevedra, Spain), A. Figueras (Vi Spain) and J.L. Barja (Santiago de Compostela, Spain). Genetics and Breeding Differential stocking incidence in brown trout (Salmo trutta) populations from Northwestern Spain P. Martinez, J. Arias, J. Castro and L. Sanchez (Lugo, Spain). Mitochondrial DNA nucleotide sequence variation in Atlantic salmon (Salmo salar brown trout (S. trutta), rainbow trout (Oncorhynchus mykiss) and brook trout (Salvelinus fontinalis) from Tasmania, Australia J.R. Ovenden, R. Bywater and R.W.G. White (Hobart, Tasmania, Australia) Husbandry and Management	igo,

Potential fecundity of redclaw crayfish, Cherax quadricarinatus von Martens, in culture C. King (Brisbane, Old., Australia)	227
Effects of initial size distribution, day length, and feeding frequency on growth, survival, and cannibalism in juvenile Atlantic cod (Gadus morhua L.)	
A. Folkvord and H. Otterå (Bergen, Norway)	243
Compensatory growth and weight segregation following light and temperature	
manipulation of juvenile Atlantic salmon (Salmo salar L.) and Arctic charr	
(Salvelinus alpinus L.)	
A. Mortensen and B. Damsgård (Alta, Norway)	261
On the role of urea in pond fertilization	
C.F. Knud-Hansen and A.K. Pautong (Bangkok, Thailand)	273
Nutrition	
Evaluation of five carbohydrate sources for Penaeus vannamei	
D.A. Davis and C.R. Arnold (Port Aransas, TX, USA)	285
Effect of dietary pH on amino acid utilization by shrimp (Penaeus vannamei)	
C. Lim (Kaneohe, HI, USA)	293
Vitamin C requirements of the shrimp Penaeus vannamei	200
H. He and A.L. Lawrence (Port Aransas, TX, USA)	305
Hydrolysis and absorption of two monophosphate derivatives of ascorbic acid by channel catfish <i>Ictalurus punctatus</i> intestine	
R.K. Buddington, A.A. Puchal, K.L. Houpe and W.J. Diehl III (Mississippi State,	
MS, USA)	317
Physiology and Endocrinology	
Feed intake, growth and osmoregulation in Arctic charr, Salvelinus alpinus (L.),	
following abrupt transfer from freshwater to more saline water	
A.M. Arnesen, E.H. Jørgensen and M. Jobling (Tromsø, Norway)	327
Optimization of fertilization parameters for rearing surf clams (Spisula solidissima)	
G. Clotteau and F. Dubé (Rimouski, Qué., Canada)	339
Short Communication	
Species differences in hepatic concentration of orally administered ³ H-AFB ₁ between	
rainbow trout (Oncorhynchus mykiss) and tilapia (Oreochromis niloticus)	
S. Ngethe (Nairobi, Kenya), T.E. Horsberg (Oslo, Norway), E. Mitema (Nairobi,	255
Kenya) and K. Ingebrigtsen (Oslo, Norway)	333
Book Reviews	
Aquaculture and the environment	
Fundamentals of aquatic ecology	360
Fish ecophysiology	361
Handbook of nutrient requirements of finfish	362
Fish behaviour	
Eel culture	365
Marine shrimp culture	366
Author Index	371
Contents of Aquaculture, volume 114	375

Contents (continued)

Hydrolysis and absorption of two monophosphate derivatives of ascorbic acid by channel catfish Ictalurus punctatus intestine	
R.K. Buddington, A.A. Puchal, K.L. Houpe and W.J. Diehl III (Mississippi State, MS,	
USA)	7
Physiology and Endocrinology	
Feed intake, growth and osmoregulation in Arctic charr, Salvelinus alpinus (L.), following abrupt transfer from freshwater to more saline water	
A.M. Arnesen, E.H. Jørgensen and M. Jobling (Tromsø, Norway)	7
Optimization of fertilization parameters for rearing surf clams (Spisula solidissima)	
G. Clotteau and F. Dubé (Rimouski, Qué., Canada)	9
Short Communication	
Species differences in hepatic concentration of orally administered ³ H-AFB ₁ between rainbow trout (<i>Oncorhynchus mykiss</i>) and tilapia (<i>Oreochromis niloticus</i>)	
S. Ngethe (Nairobi, Kenya), T.E. Horsberg (Oslo, Norway), E. Mitema (Nairobi, Kenya)	
and K. Ingebrigtsen (Oslo, Norway)	5
Book Reviews	
Aquaculture and the environment	9
Fundamentals of aquatic ecology	0
Fish ecophysiology 36	1
Handbook of nutrient requirements of finfish	2
Fish behaviour 36	3
Eel culture 36	5
Marine shrimp culture	6
Author Index	1
Contents of Aquaculture, volume 114	5

